

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) [[A]] An apparatus deviee for recording and playing back video signals, the apparatus comprising:

a) a portable storage device[;] having:

i) a portable storage device connector of a first type adapted to transfer video signals of [[a]] the first type and which is mounted on the portable storage device[;], the portable storage device connector of the first type being for direct connection to a first video system having a first video system connector of the first type for directly connecting to the portable storage device connector of the first type to exchange the video signals of the first type between the portable storage device and the first video system to record and playback the video signals of the first type;

ii) a built-in encoder-and-decoder engine for encoding the video signals of the first type into compressed video data and for decoding the compressed video data into the video signals of the first type;

iii) a non-volatile solid-state memory for storing the compressed video data; and

iv) a built-in microcontroller for sending the compressed video data to and receiving the compressed video data from the non-volatile solid-state memory; and a second video system for receiving video signals of a second type; and

b) an interface section having an interface section connector of the first type for

directly connecting to the portable storage device connector of the first type, the interface section being for converting between the video signals of the first type and the video signals of a second type, and exchanging the so that the apparatus is operable to exchange the video signals of the first type and the second type between the first video system and the a second video system through the portable storage device connector interface section connector of the first type and a signal connection between the interface section and the second video system, the second video system being for receiving the video signals of the second type.

2. (Currently Amended) The devicee apparatus of Claim 1, wherein the video signals of the first type and the second type also include audio signals which are recorded and played back by the devicee apparatus.

3. (Currently Amended) The devicee apparatus of Claim 1, wherein the portable storage device comprises at least 8MB of non-volatile solid-state memory comprises at least 8MB of memory capacity storing video data in compressed format and a built-in encoder/decoder engine for compressing and decompressing the video data.

4. (Currently Amended) The devicee apparatus of Claim [[3]] 1, wherein the portable storage device further comprises a built-in microcontroller for controlling the solid-state memory and a protocol controller for converting the video data to and from the video signals of the first type into a data signal.

5. (Currently Amended) The devicee apparatus of Claim [[4]] 1, wherein the signal connection between the interface section and the second video system further comprises an interface section connector of [[a]] the second type mounted to the interface section, the interface section connector of the second type being for direct connection to a second video system

connector of the second type mounted to the second video system for exchanging the signals of the second type through the interface section connector of the second type and the second video system connector of the second type.

6. (Canceled)
7. (Currently Amended) The devicee apparatus of Claim [[4]] 1, wherein:
~~the first video system is a computer;~~
the portable storage device connector of the first type is a USB male-type connector for direct connection to a computer;
~~the first video system connector of the first type and interface section connector of the first type are is a USB female-type connector[[s]] for direct connection to the USB male-type connector;~~
the video signals of the first type are USB protocol signals; and
the protocol controller is a USB controller.
8. (Currently Amended) The devicee apparatus of Claim [[4]] 1, wherein:
~~the first video system is a television;~~
the portable storage device connector of the first type is a HDMI connector for direct connection to a television;
~~the first video system connector of the first type and interface section connector of the first type are is a HDMI connector[[s]] for direct connection to the HDMI connector;~~
the video signals of the first type are HDMI protocol signals; and
the protocol controller is a HDMI interface.
9. (Currently Amended) The devicee apparatus of Claim 7, wherein:
~~the second video system is a television;~~
~~the second video system connector of the second type is an HDMI connector;~~
~~the interface section connector of the second type is an HDMI connector for direct connection to a television, the HDMI connector being mounted on the interface section;~~

the video signals of the second type are HDMI protocol signals;
~~the signal connection between the interface section and the second video system connector is comprised of an HDMI connector mounted on the interface section for direct connection to the second video connector;~~ and
the interface section is operable to convert[[s]] between the USB and HDMI protocol signals.

10. (Currently Amended) The device apparatus of Claim 9, wherein the interface section further comprises [[a]] an interface section microcontroller for converting between the USB and HDMI protocol signals and wherein the interface section microcontroller is electrically connected between a USB controller connected to the interface section connector of the first type and an HDMI controller connected to the interface section connector of the second type, the interface section connector of the second type being a HDMI connector mounted on the interface section.

11. (Currently Amended) The device apparatus of Claim[[4]] 1, wherein the interface section is integral with the second video system.

12. (Currently Amended) The device apparatus of Claim [[4]] 1, wherein the interface section is integral with the portable storage device.

13. (Currently Amended) The device apparatus of Claim [[4]] 1, wherein the portable storage device[[11]], when in use, is not in signal communication with both the first and second video systems.

14. (Currently Amended) The device apparatus of Claim [[4]] 1, wherein the interface section is encased in a housing separate from the portable storage device, the first video system and the second video system.

15. (Currently Amended) The device apparatus of Claim [[2]] 4 wherein the ~~portable storage device comprises at least 8MB of non-volatile solid state memory storing the video data in compressed format, a~~ the built-in encoder/decoder engine, [[a]] the built-in microcontroller, and [[a]] the protocol controller are operable to work working in cooperation to convert the video data between the compressed format and video signals of the first type into compressed video data, the format of the compressed video data being selected from the set consisting of: MPEG 1, MPEG 2, MPEG 4, MP3, MPEG 7 and MPEG 21.

16. (Currently Amended) The device apparatus of Claim 15, wherein the built-in encoder/decoder engine is programmable by ~~the~~ a computer to encode/decode different compressed data formats.

17. (Currently Amended) The device apparatus of Claim 3, further comprising a biometrics-based authentication module coupled to and controlled by the built-in microcontroller, wherein access to the non-volatile memory is granted to a user provided that the biometrics-based authentication module authenticates the user's identity and wherein access to the non-volatile memory is denied to the user otherwise.

18. (Currently Amended) The device apparatus of Claim [[3]] 17, wherein the biometrics-based authentication module includes a thumbprint sensor for acquiring data from the thumbprint of the user.

19. (Currently Amended) The device apparatus of Claim [[3]] 1, further comprising a key matrix coupled to the built-in microcontroller to allow a user to control the recording and playing back of the video signals.

20. (Canceled)

21. (Canceled)

22. (Currently Amended) A method for recording and playing back video signals comprising the steps of:

directly connecting a portable storage device connector of a first type mounted on a portable storage device to a ~~first~~ video system connector of the first type of a first video system;

transferring video signals of the first type from the first video system to the portable storage device through the ~~first~~ video system connector of the first type and the portable storage device connector of the first type;

encoding the video signals into compressed video data using an encoder engine built-into the portable storage device;

storing the compressed video data in a memory section of the portable storage device to record the video signals of the first type;

disconnecting the portable storage device connector of the first type from the ~~first~~ video system connector of the first type;

directly connecting the portable storage device connector of the first type mounted on the portable storage device to an interface section connector of the first type of an interface section;

decoding the compressed video data into decoded video signals using a decoder engine built into the portable storage device;

passing the video signals of the first type through the portable storage device connector of the first type and the interface section connector of the first type into the interface section;

converting the video signals of the first type into video signals of a second type by passing the signals through the interface section;

passing the video signals of the second type to a second video system through a signal connection between the interface section and the second video system; and

playing back the video signals on the second video system.

23. (Currently Amended) The method of Claim 22, wherein the signal connection between the interface section and the second video system comprises an interface connector of [[a]] the second type mounted to the interface section directly connected to a ~~second~~ video system connector of the second type mounted to the second video system for exchanging the signals of

the second type through the interface section connector of the second type and the ~~second~~ video system connector of the second type.

24. (Original) The method Claim 23, wherein the video signals of the first type and second type also include audio signals which are recorded and played back by the device.

25. (Original) The method of Claim 24 wherein the portable storage device comprises at least 8MB of non-volatile solid-state memory storing video data in compressed format and a built-in encoder/decoder engine for compressing and decompressing the video data.

26. (Original) The method of Claim 25, wherein the portable storage device further comprises a built-in microcontroller for controlling the solid-state memory and a protocol controller for converting the video data to and from video signals of the first type.

27. (Original) The method of Claim 26, wherein the first video system is a computer and the second video system is a television.

28. (Original) The method of Claim 27, wherein:
the first video system is a computer;
the portable storage device connector is a USB male-type connector;
the first video system connector of the first type and interface connector of the first type are USB female-type connectors;
the video signals of the first type are USB protocol signals; and
the protocol controller is a USB controller.

29. (Original) The method of Claim 26, wherein:
the first video system is a television;
the portable storage device connector is a HDMI connector;
the first video system connector of the first type and interface connector of the first type are HDMI connectors;

the video signals of the first type are HDMI protocol signals; and
the protocol controller is a HDMI interface.

30. (Currently Amended) The method of Claim 26, wherein:
the second video system is a television;
the ~~second~~ video system connector of the second type is an HDMI connector;
the video signals of the second type are HDMI protocol signals;
the signal connection between the interface section and the ~~second~~ video system connector of the second type is comprised of an HDMI connector mounted on the interface section for direct connection to the ~~second~~ video system connector of the second type; and
the interface section converts between the USB and HDMI protocol signals.
31. (Currently Amended) The method of Claim 30, wherein the interface section comprises [[a]] an interface section microcontroller for converting between the USB and HDMI protocol signals and wherein the interface section microcontroller is electrically connected between a USB controller connected to the interface section connector of the first type and an HDMI controller connected to the HDMI connector mounted on the interface section.
32. (Original) The method of Claim 26, wherein the interface section is integral with the first video system.
33. (Original) The method of Claim 26, wherein the interface section is integral with the portable storage device.
34. (Currently Amended) The method of Claim 26, wherein the portable storage device [[11]], when in use, is not in signal communication with both the first and second video systems.
35. (Original) The method of Claim 26, wherein the interface section is encased in a housing separate from the portable storage device, the first video system and the second video system.

36. (Currently Amended) The method of Claim 24 wherein the portable storage device comprises at least 8MB of non-volatile solid-state memory storing the video data in compressed format, a built-in encoder/decoder engine, [[a]] the built-in microcontroller, and a protocol controller working in cooperation to convert the video data between the compressed format and video signals of the first type, the format of the compressed data selected from the set consisting of: MPEG 1, MPEG 2, MPEG 4, MP3, MPEG 7 and MPEG 21.

37. (Original) The method of Claim 36, wherein the built-in encoder/decoder engine is programmable by the computer to encode/decode different compressed data formats.

38. (Currently Amended) The method of Claim 25, further comprising the step of:
granting a user access to the non-volatile memory based upon authentication of the identity of the user by a biometrics-based authentication module coupled to and controlled by the built-in microcontroller; and
denying the user access to the non-volatile memory otherwise.

39. (Original) The method of Claim 38, wherein the biometrics-based authentication module includes a thumbprint sensor for acquiring data from the thumbprint of the user.

40. (Currently Amended) The method of Claim 25, further comprising the step of controlling the recording and playing back of the video signals using a key matrix coupled to the built-in microcontroller.